

## A NEW GENUS AND NEW SPECIES OF GEOMETRID MOTH FROM TEXAS

DOUGLAS C. FERGUSON

Systematic Entomology Laboratory, IIBIII, Agricultural Research Service, USDA,  
% U.S. National Museum of Natural History, Washington, D.C. 20560

**ABSTRACT.** A new genus and new species of geometrid moth are described from West Texas. Although clearly belonging to the subfamily Ennominae, tribe Ourapterygini, this distinctive moth seems to have no close relatives. Its larva and foodplant are unknown.

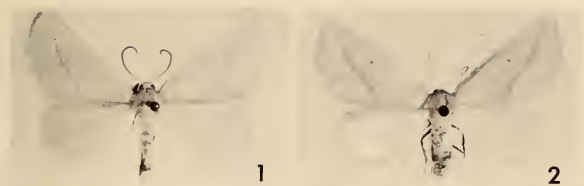
A geometrid from West Texas, first brought to my attention by Mr. André Blanchard 10 years ago, is undescribed and furthermore, does not fit the description of any known genus. It is clearly a member of the very large, possibly heterogeneous tribe Ourapterygini by reason of the single, massive, asymmetrical furca of the male genitalia, occurring in combination with a double accessory cell in the forewing, and it shows some affinity with the group that includes such genera as *Lychnosea* Grote, *Caripeta* Walker, *Snowia* Neumögen, *Destutia* Grossbeck, *Besma* Capps, *Lambdina* Capps, *Cingilia* Walker, *Nepytia* Hulst, *Eusarca* Hübner, and *Somatolophia* Hulst. The Texas species does not fit any of these, however, nor any of the neotropical genera that were investigated in the effort to place it. Species of most ourapterygine genera typically have a cluster or transverse row of hooklike spines at the extremity of the gnathos. The present species lacks these but instead has an extended, rather massive and recurved gnathos unlike any other. The so-called furca is also unusually enlarged but shows every indication of being homologous to those of the genera mentioned above.

More than anything else the moth has the appearance of a small, pale, tawny-yellow, evenly colored *Sicya morsicaria* (Hulst), or even a small, narrow-winged *Tetracis crocallata* Guenée (although the forewing has only the slightest suggestion of an angulate outer margin). However, the genitalia at once remove it from close association with either of those genera, and indeed the species seems to have no really close relatives.

### ***Sicyopsis blanchardata*, new genus, new species**

(Figs. 1-6)

As *S. blanchardata* is the only included species, it is not possible to differentiate between generic and specific characters; thus, the descriptions are combined.



FIGS. 1, 2. *Sicyopsis blanchardata*, n. gen., n. sp.: 1, holotype male; 2, allotype female (about natural size).

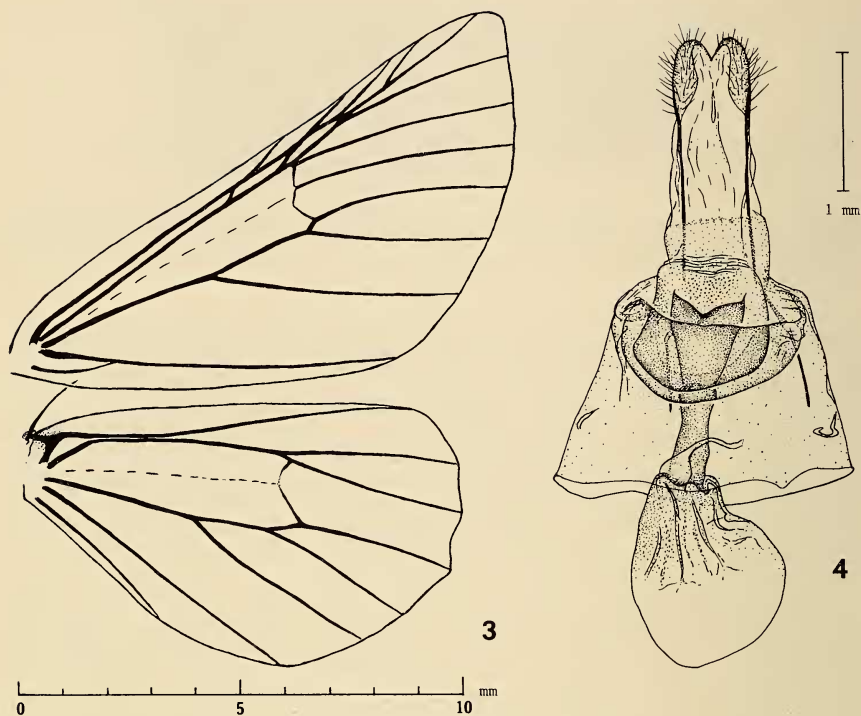
**Description.** Front smooth, convex, covered with closely appressed, elongated, mostly singly notched scales, its surface in lateral profile nearly parallel to, and just slightly farther out than that of adjoining eye surfaces; front about  $1\frac{1}{2}$  times as wide at top as at bottom; eyes of both sexes large, each about equal in width (in radial view) to length of labial palpi, but slightly smaller in female than in male; palpi short, those of male usually slightly exceeding front, of female not exceeding front; tongue well developed; male antennae simple but thickened dorsoventrally, compressed, with quadrate, finely setose segments (prismatic); female antennae simple, filiform; legs with tibiae hardly swollen, epiphyses extending to ends of foretibiae, and both pairs of hindtibial spurs present in both sexes; vestiture of thorax predominantly of long, hairlike scales, intermixed with a few short, broad scales.

Wings somewhat narrow, forewings with costa nearly straight, outer margin slightly angulate in females, usually evenly convex in males. Forewings light tawny yellow to cream colored, with or without an almost straight, light-brown, oblique, postmedial band from near middle of inner margin to a point on costa just basad of apex, and a small, brown discal spot; fringes concolorous with wings; hindwings paler, unmarked; underside unmarked. Venation (Fig. 3) typical of group of genera to which species seems to belong; for example, almost exactly like that of *Destutia excelsa* (Strecker), except that accessory cells of forewing variably less elongated in the four specimens examined for venation characters. Length of forewing: holotype, 14 mm; other males, 13–14 mm; allotype, 14 mm; other females, 13–15 mm.

**Male genitalia** (Figs. 5, 6). Uncus, gnathos, and costa of valve stout, heavily sclerotized; gnathos elongated and abruptly recurved at about the middle, broad and flattened toward end but tapering to a blunt point apically; small, lightly sclerotized socii present; juxta invaginated, pouchlike, with a large, broad, single, curved, asymmetrical furca arising from it. As in related forms, ventral lamella of furca attached to juxta, and dorsal lamella to a thinly sclerotized plate of the anellus; furca bearing group of short spines toward its tapered extremity, transtilla incomplete; aedeagus slender, with 7–8 small cornuti.

**Female genitalia** (Fig. 4). Ductus bursae and ostium forming a nearly straight, stout, rigidly sclerotized, funnel-shaped unit; sterigma large, doubly invaginated as shown. Lack of signum unusual for the tribe.

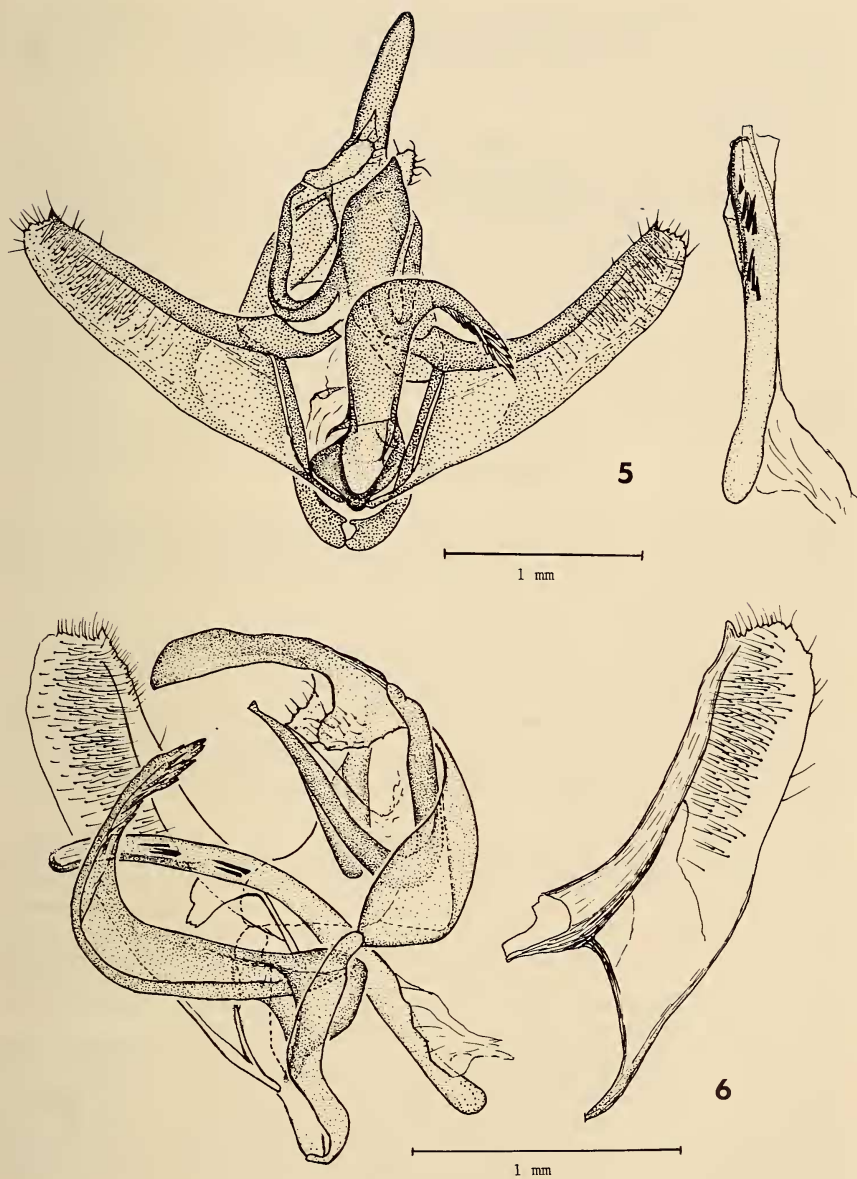
**Types.** HOLOTYPE MALE (Fig. 1): Smith Canyon, 5750 ft, Guadalupe Mountains, Culberson Co., Texas, 22 May 1973, D. C. Ferguson. ALLOTYPE FEMALE: Panther Pass, 6000 ft, Chisos Mountains, Brewster Co., Texas, 2 June 1973, D. C. Ferguson. PARATYPES: 1 ♂, same data as for holotype; 1 ♂, 1 ♀, McKittrick Canyon, 5000 ft, Guadalupe Mountains, Culberson Co., 23 May 1973, D. C. Ferguson; 4 ♂♂, Bear Canyon, 5400 ft, Guadalupe Mountains, 3 Sept. 1969, A. & M. E. Blanchard; 4 ♂♂, 2 ♀♀, Bear Canyon, 5700 ft, Guadalupe Mountains, 4 Sept. 1969, A. & M. E. Blanchard; 1 ♂, Pine Canyon, 5700 ft, Guadalupe Mountains, 28 Aug. 1967, A. & M. E. Blanchard; 9 ♂♂, Sierra Diablo Wildlife Management Area, 6000 ft, 20 mi. NNW of Van Horn, Culberson Co., 20 May 1968 (1), 5 June 1969 (4), 14 July 1971 (2), 30 Aug. 1970 (1), 24 Sept. 1967



FIGS. 3, 4. *Sicyopsis blanchardata*: 3, wing venation; 4, female genitalia, from USNM slide 56097 (Guadalupe Mts.).

(1), A. & M. E. Blanchard; 1 ♂, same locality, 30 May 1973, D. C. Ferguson; 10 ♂♂, same locality, 30 Aug. 1970 (6), 31 Aug. 1970 (4), J. G. Franclemont; 2 ♀♀, same locality and collector, 30 Aug. 1970; 1 ♀, 10 mi. north of Van Horn, Culberson Co., 2 Sept. 1979, E. C. Knudson; 23 ♂♂, Green Gulch, 5500 ft, Chisos Mountains, Big Bend National Park, Brewster Co., 10 May 1966 (1), 14 May 1966 (1), 27 June 1965 (2), 1 July 1965 (1), 14 Sept. 1971 (5), 2 Oct. 1967 (10), 5 Oct. 1965 (2), 7 Oct. 1965 (1), A. & M. E. Blanchard; 1 ♀, same locality and collectors, 27 Aug. 1965; 1 ♀, same locality, 6 June 1973, D. C. Ferguson; 10 ♂♂, Chisos Basin, Big Bend National Park, 29 June 1965 (1), 30 Aug. 1964 (1), 27 Sept. 1965 (4), 2 Oct. 1966 (3), 7 Oct. 1966 (1), A. & M. E. Blanchard; 3 ♀♀, same locality and collectors, 30 Aug. 1964, 24 Sept. 1963, 5 Oct. 1967; 1 ♂, same locality, 14 May 1977, E. C. Knudson; 3 ♂♂, Government Spring, Big Bend National Park, 13 May 1966, 29 Sept. 1965, 4 Oct. 1967, A. & M. E. Blanchard; 9 ♂♂, Oak Spring, Big Bend National Park, 4 Oct. 1965 (2), 5 Oct. 1967 (5), 5 Oct. 1965 (2), A. & M. E. Blanchard; 1 ♂, K-Bar Research Station, Big Bend National Park, 25 Sept. 1971, A. & M. E. Blanchard.

All localities cited are in West Texas. The Guadalupe Mountain localities are in Guadalupe Mountains National Park in canyons on the east side of the range. The holotype, allotype, and some of the paratypes are in the collection of the U.S. National Museum of Natural History; other type material is in the collections of A. Blanchard, J. G. Franclemont, and E. C. Knudson.



FIGS. 5, 6. *Sicyopsis blanchardata*, male genitalia: **5**, ventral view, aedeagus removed, from slide AB 1257 (Big Bend National Park). **6**, ventrolateral view, right valve removed, aedeagus *in situ*, from slide AB 1376 (Green Gulch). Drawings by A. Blanchard and the author.

**Distribution.** All known localities are given above. Not known from Mexico, but inasmuch as many were collected virtually within sight of the border, it undoubtedly occurs there.

**Flight period.** 10 May–7 October.

**Early stages.** Unknown.

**Remarks.** This species has been named in honor of Mr. André Blanchard of Houston, Texas, who collected most of the material and who personally conducted me to the localities where those that I collected were found. He also provided the drawings for Figs. 3, 5, and 6, which I modified for publication. I also acknowledge the assistance of A. Blanchard, E. C. Knudson, and J. G. Franclemont for providing information or access to their collections.

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## BOOK REVIEW

A REVISION OF *PHYCIODES* HÜBNER AND RELATED GENERA, WITH A REVIEW OF THE CLASSIFICATION OF THE MELITAEINAE (LEPIDOPTERA: NYMPHALIDAE) by L. G. Higgins. 29 October 1981. Bulletin of the British Museum (Natural History), Entomological Series, Vol. 43, No. 3, pp. 77–243, 490 figs.

This concludes Higgins' 30-year study of the melitaeines of the world. In the present volume the Phyciodini and ten genera are described and named for the first time. At the species-group level eight new names are introduced. Many shifts from the species-group arrangements of Arthur Hall (1928–1930) and William T. M. Forbes (1945, 1946) have been necessary. Higgins' work had the advantage of the huge collections of the British Museum (Nat. Hist.) and Hall's very large collection in the Booth Museum, Bristol, England. In the British Museum alone Higgins had before him 76% of the types involved.

For each name noted in his complete synonymies for every accepted species, Higgins notes the author, original citation, type locality and repository of the type. In the cases of five authors the type repositories evaded him. Reakirt's types are in the Strecker Collection, Field Museum of Natural History, currently on long-term loan to the Allyn Museum in Sarasota, Florida. David Bauer's types are in his own collection, South Lake Tahoe, California. Brehme's types may be with the material from the Brooklyn Museum now in the U.S. National Museum of Natural History, Washington, D.C. I have no idea where Fender's type of *P. mylitta* ab. "maceyi" may be. Cockerell's two abs. of *camillus*, "rohweri" and "tristis," probably have been lost.

None of the newly proposed generic names affect species names in the United States and Canada. A comparison between Higgins' arrangement and Brown's arrangement of *Phyciodes* in the new Catalogue/Checklist shows the usual differences in assignment of status, i.e., species, subspecies and synonyms, between two serious students of any topic. Higgins' approach is more conservative than Brown's. There are two differences that are more substantial: Where Higgins used *campestris* Behr, 1863 (following Barnes & McDunnough, 1917), Brown reverted to the earlier use of *pratensis* Behr, 1863 as the species name, following Strecker's Catalogue of 1876 as a "first revision." Whereas, Higgins overlooked *callina* Boisduval, 1869, as a misspelling of *collina* Behr, 1863, Brown considers it a subspecies of *mylitta*, with *arizonensis* Bauer being a synonym.

No price is noted on my copy of the revision. I am sure that Classey will be handling it and suggest that anyone interested write to him at his England headquarters.

F. MARTIN BROWN, *Wright-Ingraham Institute, Colorado Springs, Colorado 80904.*